

Title (en)
LINEAR MOTOR

Title (de)
LINEARMOTOR

Title (fr)
MOTEUR LINÉAIRE

Publication
EP 3065274 A4 20170712 (EN)

Application
EP 14885096 A 20141023

Priority
• JP 2014049288 A 20140312
• JP 2014078261 W 20141023

Abstract (en)
[origin: EP3065274A1] A linear motor has a tubular body and a rod that penetrates the tubular body in an axial direction, and is configured to displace the tubular body and the rod relative to each other in the axial direction. The linear motor includes: $12n+1$ (where n is a positive integer) teeth arranged in the axial direction so as to project from an inner peripheral surface of the tubular body; $12n$ slots respectively formed between adjacent teeth of the plurality of teeth; $12n$ coils respectively disposed in the slots; and a plurality of permanent magnets held in the rod so as to be arranged in the axial direction. The respective coils are formed by being wound around an axis of the rod in an identical direction, and the number of permanent magnets positioned in the tubular body is set to $8n$.

IPC 8 full level
H02K 41/03 (2006.01); **H02K 3/12** (2006.01); **H02K 3/28** (2006.01)

CPC (source: EP US)
H02K 3/12 (2013.01 - US); **H02K 3/28** (2013.01 - EP US); **H02K 41/02** (2013.01 - US); **H02K 41/031** (2013.01 - EP US);
H02K 2213/03 (2013.01 - EP US)

Citation (search report)
• [X] US 2014042833 A1 20140213 - HIURA RYOTA [JP], et al
• [I] EP 2541744 A2 20130102 - SANYO ELECTRIC CO [JP]
• [A] DE 19827846 A1 19991230 - FRANKL & KIRCHNER [DE]
• See references of WO 2015136758A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
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US 2016336825 A1 20161117; WO 2015136758 A1 20150917

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